In The Claims

Please make the following amendments to the claims:

1.   (Original) A device for making automated transaction decisions comprising:

a memory to store a series of historical records and results, where each record contains a set of data values for a corresponding set of variables;

a transaction input unit to convey corresponding data values of a transaction for which a decision is to be made;

a decision output unit to convey a recommended decision;

a self-configuring modeler to configure itself based upon information stored in memory in order to predict expected results from any set of data values; and

a controller coupled to the modeler and the transaction input unit to generate a decision output.

2.   (Original) The device in Claim 1 further including an output unit to convey a probability or expected value of an expected result given the decision.

3.   (Original) The device in Claim 1 further including an output unit to convey a model produced by the modeler.

4.   (Original) The device in Claim 1 further comprising a previously configured modeler.

5.   (Original) The device in Claim 1 wherein the model is continuously updated with each transaction.

6.   (Currently Amended) The device in Claim 5, further comprising: ~~wherein the modeler configures itself to recommend an optimal solution in a reduced time period~~

a scoring evaluator to compare two Bayesian networks and to assign a higher score to a one of the two networks that has a shorter evaluation time.

7.   (Original) A method for analyzing and representing data in a computer system comprising:

    determining statistical probabilities of each combination of data values;

    applying the statistical probabilities to determine an optimal predictive model;

    applying a transaction consisting of a new set of data values to the predictive model in order to yield an expected set of probabilities for a result of each possible decision;

    presenting the representation to a control mechanism capable of enacting decisions based on the knowledge represented; and

    generating a decision output.

8.   (Original) The method in Claim 7 further comprising conveying an probability or expected value of the decision.

9.   (Original) The method in Claim 7 further comprising means conveying a model produced by a modeler.

10.   (Original) The method in Claim 7 wherein the predictive model is adjusted based upon each transaction and result.